CLAIMS

What is claimed is:

1. A composition comprising at least one immunogenic ligand, wherein said immunogenic ligand is individually characterized by an ability to elicit an immune response against the same native ligand, and wherein said immunogenic ligand is selected from the group consisting of SEQ ID NOs.: 3, 5 and 7.

2. The composition of claim 1, further comprising an immunogenic portion of SEQ ID NO: 1.

3. The composition of claim 1, further comprising a carrier.

4. The composition of claim 3, wherein the carrier is a pharmaceutically acceptable carrier.

5. A host cell comprising at least one immunogenic ligand, wherein said immunogenic ligand is individually characterized by an ability to elicit an immune response against the same native ligand, and wherein said immunogenic ligand is selected from the group consisting of SEQ ID NOs.: 3, 5 and 7.

6. The host cell of claim 5, wherein the host cell is an antigen presenting cell and the immunogenic ligands are presented on the surface of the cell.

7. The host cell of claim 6, wherein the antigen presenting cell is a dendritic cell.

8. A composition comprising the host cell of any of claims 5 to 7 and a carrier.

9. The composition of claim 8, wherein the carrier is a pharmaceutically acceptable carrier.

10. A method for inducing an immune response in a subject, comprising delivering to the subject a composition comprising an effective amount of at least one immunogenic ligand, wherein each of said immunogenic ligands is characterized by an ability to elicit an immune response against the same native ligand, and wherein said immunogenic ligand is selected from the group consisting of SEQ ID NOs.: 3, 5 and 7.

11. The method of claim 10, further comprising delivering an effective amount of an immunogenic portion of the sequence shown in SEQ ID NO: 1.

12. A method of aiding in the diagnosis of the neoplastic condition or susceptibility to a neoplastic condition of an animal cell or tissue comprising:

determining the amount of expression of an CK-18 protein in a test sample isolated from said cell or tissue, and

diagnosing a neoplastic condition or susceptibility to a neoplastic condition based on the amount of expression of the CK-18 protein.

13. The method of claim 12, wherein the amount of expression of said protein is determined by detecting the amount of mRNA transcribing said protein.

14. The method of claim 13, wherein said detecting is by probing said test sample with a probe or primer that specifically hybridizes under conditions of moderate or highly stringent conditions with said CK-18 mRNA.

15. The method of claim 14, wherein said probe or primer comprises at least 9 consecutive residues of a protein encoded by a nucleic acid encoding a sequence recited in SEQ ID NO: 1, or its complement.

16. The method of claim 14, wherein said probe or primer is immobilized on a solid support.

17. The method of claim 14, wherein said probe or primer is detectably labeled.

18. The method of claim 14, wherein said probe or primer comprises a sequence consisting of at least 9 consecutive polynucleotides of SEQ ID NO: 2 or SEQ ID NO: 8, and complements of these sequences.

19. The method of claim 14, wherein said probe or primer comprises a nucleic acid sequence encoding a peptide selected from the group consisting of SEQ ID NOs.: 1 or 7, and complements of nucleic acids encoding said peptides.

20. The method of claim 12, wherein said expression is at least 2 fold greater than in normal or control sample.

21. The method of claim 12, wherein said detected is determined by probing said sample with an agent that specifically recognizes and binds said protein.

22. The method of claim 21, wherein said agent comprises a biologically active immunoglobulin variable domain that specifically recognizes or binds to said protein or an antigen binding fragment thereof.

23. The method of claim 22, wherein said agent is a polyclonal or monoclonal antibody.

24. The method of claim 22, wherein said agent is a cell that binds to said protein.

25. The method of claim 24, wherein said cell is an immune effector cell raised in the presence and at the expense of a peptide selected from the group consisting of SEQ ID NOs.: 1, 3, 5 and 7.

26. The method of claim 12, wherein said test sample is isolated from the group of cells or tissues selected from breast or lung.

27. The method of claim 26, wherein said detecting is by *in vivo* imaging.

28. The method of claim 23, wherein said monoclonal antibody is prepared from an animal immunized with a peptide selected from the group consisting of SEQ ID NOs.: 1, 3, 5 and 7.

29. The method of claim 21, wherein said agent comprises a biologically active immunoglobulin variable domain isolated from an antibody prepared from an animal immunized with a peptide selected from the group consisting of SEQ ID NOs.: 1, 3, 5 and 7.

30. The method of claim 14, wherein said detection is by polymerase chain reaction or by hybridization assay.

31. The method of claim 16, wherein said solid support is a chip.

32. The method of claim 12, wherein expression of said protein is by determining the identity and expression level of mRNA by expression analysis and comparing the sequences and amount of mRNA to expression analysis of a control sample.

33. A diagnostic kit comprising at least one agent that specifically recognizes and binds CK-18 protein and instructions for detecting binding between CK-18 protein in a test sample and said agent.

34. A kit of claim 33, wherein said agent is immobilized on a solid support.

35. A kit of claim 34, wherein said solid support is selected from the group consisting of nitrocellulose, latex, plastic and chip.

36. A kit of claim 34, wherein said agent is an antibody and said detection reagent comprises an anti-immunoglobulin, protein G, protein A, or lectin.

37. A kit of claim 33, wherein said detecting is selected from the group consisting of radioisotopes, fluorescent groups, luminescent groups, enzymes, biotin and dye particles.

38. A diagnostic kit comprising a probe or primer of claim 14.

39. An assay to screen for agents that modulate the binding of CK-18 protein to its ligand comprising contacting a sample comprising said protein and said ligand under conditions and in the presence of a test agent and detecting any binding between said protein and said ligand, a change in said binding being indicative of an agent that modulates the binding of CK-18.

40. The assay of claim 39, wherein said modulation comprises increased avidity or affinity between said agent and said protein.